**IT Applications Unit 3, AOS 1, Online Communities**

Complete the following, from Chapter 2, Problem-solving Methodology, pgs, 60-80

**Evaluation Criteria and prototype websites, p 76**

**Identifying evaluation criteria**, p 76

1. **What is the purpose of evaluating the solution?**

To find out whether a solution has fulfilled the problem that was determined at the analysis stage of the project. It is used to identify if the solution has met the needs of the organisation.

**In identifying evaluation criteria efficiency and effectiveness can be used as a scaffold.**

1. **Give an example of a measure in terms of efficiency and effectiveness.**

Does the website allow members to communicate easier with other members of the community than previous methods?

**Developing a prototype website, p 76**

1. **What is a prototype website?**

A **model or simulation** that demonstrates functionality, partial nav options and the interface.

**Development stage of PSM (Problem Solving Methodology) involve:**

Using appropriate software to build a solution.

Using validation to ensure reasonable data is used.

Testing the solution so it performs as required.

1 **Using validation**

1. **How does validation occur?**

Validation involves checking data for accuracy and completeness, either manually or electronically. Manual validation involves the person who entered the data to check that it is correct, e.g. proofreading. Electronic validation involves using software features such as spell-check.

1. **Manipulation to build a solution**

Occurs when the data is transformed into info and involves more than editing and formatting.

1. **List tasks involved with manipulation.**

Image Compression- needs to be done properly so that appearance, and more importantly, the speed is up to standard.

Copying data from a word processed document- reformatting it and placing it on a webpage.

1. **What are cascading style sheets and meta tags?**

**Cascading Style Sheet-** style sheet language used to ensure that the text and links use a common format throughout the website. A CSS is useful as it allows users to create templates for their website.

**Meta Tags-** Meta tags are applied to images to ensure that the accessibility and meaning of the website is not compromised. They are also used to ensure that the website is accurately recorded by the search engine bots.

1. **Testing the prototype solution**, p 78

List the testing undertaken for:

* **Function**
  + **List some tests for functionality.**
    - The navigation design works.
    - Webpage loads properly.
    - The CSS is accessed by every page in the website.
    - The website can be viewed in various screen sizes.
  + **What is the difference between an absolute and a relative link?**

An absolute link uses the exact web address to access a page. They are quite often used when navigating outside of the webpage. A relative link refers to a link that uses alternative text to link to a webpage (e.g. using the words ‘main page’ as a link to (index.html).

* **Appearance**
  + **List some tests for appearance**
    - Acceptable formats and conventions have been used throughout the entire website.
    - It meets the cultural, gender and age requirements.
    - The navigation bar and a ‘homepage’ link is easily accessed on every page.
  1. Draw an example of an effective testing table.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Description | Test Data | Expected Result | Actual Result | Are there errors |
| Test the navigation bar works | Click on each link and follow it to determine that it works as expected | Each Link works | Links work | No |
| Test the closed section of the website is protected | Test correct password, then test incorrect password | When correct name + password are typed then the user will be taken to the closed section. A incorrect password will result in a dialog box error. | Did not work as expected | Check password for the closed section |
| The homepage speed is under 5 seconds | Page size for index.html equals 34 Kb | Expected loading time should be less than 5 seconds | Model loads in 4.2 seconds | No |